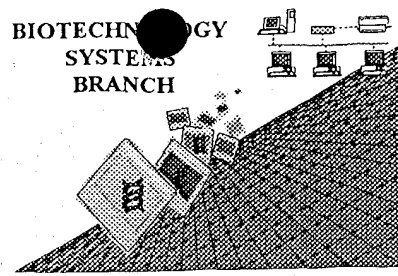


WAF
CRF



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/823,257

Source: OIPE

Date Processed by STIC: 4-17-01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/823,257

DATE: 04/17/2001
TIME: 10:50:13

Input Set : A:\P0715seqUS.txt
Output Set: N:\CRF3\04172001\I823257.raw

3 <110> APPLICANT: Landers, John
5 <120> TITLE OF INVENTION: High Throughput Methods for Haplotyping
7 <130> FILE REFERENCE: P0715/7003 (HCL)
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/823,257
C--> 9 <141> CURRENT FILING DATE: 2001-03-30
9 <150> PRIOR APPLICATION NUMBER: US 60/194,425
10 <151> PRIOR FILING DATE: 2000-04-04
12 <160> NUMBER OF SEQ ID NOS: 24
14 <170> SOFTWARE: PatentIn version 3.0
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 20
18 <212> TYPE: DNA
19 <213> ORGANISM: Homo sapiens
21 <220> FEATURE:
W--> 22 <221> NAME/KEY: Artificial sequence
23 <222> LOCATION: (1)..(20)
24 <223> OTHER INFORMATION: Synthetic oligonucleotide
27 <400> SEQUENCE: 1
28 cctcagtac atccttgct
31 <210> SEQ ID NO: 2
32 <211> LENGTH: 20
33 <212> TYPE: DNA
34 <213> ORGANISM: Homo sapiens
36 <220> FEATURE:
W--> 37 <221> NAME/KEY: Artificial Sequence
38 <222> LOCATION: (1)..(20)
39 <223> OTHER INFORMATION: Synthetic Oligonucleotide
42 <400> SEQUENCE: 2
43 catgccatt cttctctggt
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 31
48 <212> TYPE: DNA
49 <213> ORGANISM: Homo sapiens
51 <220> FEATURE:
W--> 52 <221> NAME/KEY: Artificial Sequence
53 <222> LOCATION: (1)..(31)
54 <223> OTHER INFORMATION: Synthetic Oligonucleotide
57 <220> FEATURE:
58 <221> NAME/KEY: misc_feature
59 <222> LOCATION: (1)..(1)
60 <223> OTHER INFORMATION: amino group attached
63 <400> SEQUENCE: 3
64 tttttttttt ttttttagtct cccctttccc t
67 <210> SEQ ID NO: 4
68 <211> LENGTH: 32
69 <212> TYPE: DNA
70 <213> ORGANISM: Homo sapiens

Does Not Comply
Corrected Diskette Needed

Artificial sequence is
an invalid response for
<221> Name/Key.

<213> response should be:
20

- 1 - Genus species of organism
- 2 - Unknown sequence
- 3 - Artificial sequence.

20
Unknown and artificial
sequences must have <220>,
<223> features to explain
the source of the genetic
material in the sequence.

31
Example:

<213> Artificial sequence.

<220>
<223> Synthetic Human
Oligonucleotide.

Note ↓

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING DATE: 04/17/2001
 PATENT APPLICATION: US/09/823,257 TIME: 10:50:13

Input Set : A:\P0715seqUS.txt
 Output Set: N:\CRF3\04172001\I823257.raw

```

72 <220> FEATURE:
W--> 73 <221> NAME/KEY: Artificial Sequence
74 <222> LOCATION: (1)..(32)
75 <223> OTHER INFORMATION: Synthetic Oligonucleotide
78 <220> FEATURE:
79 <221> NAME/KEY: misc_feature
80 <222> LOCATION: (1)..(1)
81 <223> OTHER INFORMATION: amino group attached
84 <400> SEQUENCE: 4
85 tttttttttt tttttagtct cccaatttcc ct
88 <210> SEQ ID NO: 5
89 <211> LENGTH: 17
90 <212> TYPE: DNA
91 <213> ORGANISM: Homo sapiens
93 <220> FEATURE:
W--> 94 <221> NAME/KEY: Artificial Sequence
95 <222> LOCATION: (1)..(17)
96 <223> OTHER INFORMATION: Synthetic Oligonucleotide
99 <400> SEQUENCE: 5
100 aggggtggtgc cagaggt
103 <210> SEQ ID NO: 6
104 <211> LENGTH: 17
105 <212> TYPE: DNA
106 <213> ORGANISM: Homo sapiens
108 <220> FEATURE:
W--> 109 <221> NAME/KEY: Artificial Sequence
110 <222> LOCATION: (1)..(17)
111 <223> OTHER INFORMATION: Synthetic Oligonucleotide
114 <400> SEQUENCE: 6
115 aggggtggtac cagaggt
118 <210> SEQ ID NO: 7
119 <211> LENGTH: 20
120 <212> TYPE: DNA
121 <213> ORGANISM: Homo sapiens
123 <220> FEATURE:
W--> 124 <221> NAME/KEY: Artificial Sequence
125 <222> LOCATION: (1)..(20)
126 <223> OTHER INFORMATION: Synthetic Oligonucleotide
129 <220> FEATURE:
130 <221> NAME/KEY: misc_feature
131 <222> LOCATION: (1)..(1)
132 <223> OTHER INFORMATION: phosphate group attached
135 <400> SEQUENCE: 7
136 acttgacagc gagtgtgctg
139 <210> SEQ ID NO: 8
140 <211> LENGTH: 18
141 <212> TYPE: DNA
142 <213> ORGANISM: Homo sapiens
144 <220> FEATURE:

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/823,257

DATE: 04/17/2001
TIME: 10:50:14

Input Set : A:\P0715seqUS.txt
Output Set: N:\CRF3\04172001\I823257.raw

W--> 145 <221> NAME/KEY: Artificial Sequence
146 <222> LOCATION: (1)..(18)
147 <223> OTHER INFORMATION: Synthetic Oligonucleotide
150 <400> SEQUENCE: 8
151 gtccctttgc tgcgtgac 18
154 <210> SEQ ID NO: 9
155 <211> LENGTH: 40
156 <212> TYPE: DNA
157 <213> ORGANISM: Homo sapiens
159 <220> FEATURE:
W--> 160 <221> NAME/KEY: Artificial Sequence
161 <222> LOCATION: (1)..(40)
162 <223> OTHER INFORMATION: Synthetic Oligonucleotide
165 <220> FEATURE:
166 <221> NAME/KEY: misc_feature
167 <222> LOCATION: (1)..(1)
168 <223> OTHER INFORMATION: amino group attached
171 <400> SEQUENCE: 9
172 tttttttttt tttttttttt tttcacccaa tggaagccat 40
175 <210> SEQ ID NO: 10
176 <211> LENGTH: 40
177 <212> TYPE: DNA
178 <213> ORGANISM: Homo sapiens
180 <220> FEATURE:
W--> 181 <221> NAME/KEY: Artificial Sequence
182 <222> LOCATION: (1)..(40)
183 <223> OTHER INFORMATION: Synthetic Oligonucleotide
186 <220> FEATURE:
187 <221> NAME/KEY: misc_feature
188 <222> LOCATION: (1)..(1)
189 <223> OTHER INFORMATION: amino group attached
192 <400> SEQUENCE: 10
193 tttttttttt tttttttttt tttcacccaa tagaagccat 40
196 <210> SEQ ID NO: 11
197 <211> LENGTH: 17
198 <212> TYPE: DNA
199 <213> ORGANISM: Homo sapiens
201 <220> FEATURE:
W--> 202 <221> NAME/KEY: Artificial Sequence
203 <222> LOCATION: (1)..(17)
204 <223> OTHER INFORMATION: Synthetic Oligonucleotide
207 <400> SEQUENCE: 11
208 aggaaatcgg cagctgt 17
211 <210> SEQ ID NO: 12
212 <211> LENGTH: 17
213 <212> TYPE: DNA
214 <213> ORGANISM: Homo sapiens
216 <220> FEATURE:
W--> 217 <221> NAME/KEY: Artificial Sequence

RAW SEQUENCE LISTING DATE: 04/17/2001
PATENT APPLICATION: US/09/823,257 TIME: 10:50:14

Input Set : A:\P0715seqUS.txt
Output Set: N:\CRF3\04172001\I823257.raw

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218 <222> LOCATION: (1)..(17)
219 <223> OTHER INFORMATION: Synthetic Oligonucleotide
222 <400> SEQUENCE: 12
223 aggaaatcag cagctgt 17
226 <210> SEQ ID NO: 13
227 <211> LENGTH: 17
228 <212> TYPE: DNA
229 <213> ORGANISM: Homo sapiens
231 <220> FEATURE:
W--> 232 <221> NAME/KEY: Artificial Sequence
233 <222> LOCATION: (1)..(17)
234 <223> OTHER INFORMATION: Synthetic Oligonucleotide
237 <220> FEATURE:
238 <221> NAME/KEY: misc_feature
239 <222> LOCATION: (1)..(3)
240 <223> OTHER INFORMATION: Biotin attached
243 <400> SEQUENCE: 13
244 aggaaatcgg cagctgt 17
247 <210> SEQ ID NO: 14
248 <211> LENGTH: 17
249 <212> TYPE: DNA
250 <213> ORGANISM: Homo sapiens
252 <220> FEATURE:
W--> 253 <221> NAME/KEY: Artificial Sequence
254 <222> LOCATION: (1)..(17)
255 <223> OTHER INFORMATION: Synthetic Oligonucleotide
258 <220> FEATURE:
259 <221> NAME/KEY: misc_feature
260 <222> LOCATION: (1)..(3)
261 <223> OTHER INFORMATION: Biotin attached
264 <400> SEQUENCE: 14
265 aggaaatcag cagctgt 17
268 <210> SEQ ID NO: 15
269 <211> LENGTH: 24
270 <212> TYPE: DNA
271 <213> ORGANISM: Homo sapiens
273 <220> FEATURE:
W--> 274 <221> NAME/KEY: Artificial Sequence
275 <222> LOCATION: (1)..(24)
276 <223> OTHER INFORMATION: Synthetic Oligonucleotide
279 <400> SEQUENCE: 15
280 gaacagcaat gcacattacc atgg 24
283 <210> SEQ ID NO: 16
284 <211> LENGTH: 25
285 <212> TYPE: DNA
286 <213> ORGANISM: Homo sapiens
288 <220> FEATURE:
W--> 289 <221> NAME/KEY: Artificial Sequence
290 <222> LOCATION: (1)..(25)
```

RAW SEQUENCE LISTING

DATE: 04/17/2001

PATENT APPLICATION: US/09/823,257

TIME: 10:50:14

Input Set : A:\P0715seqUS.txt

Output Set: N:\CRF3\04172001\I823257.raw

```

291 <223> OTHER INFORMATION: Synthetic Oligonucleotide
294 <400> SEQUENCE: 16
295 ctgtcaagta tttctccgca gcata
298 <210> SEQ ID NO: 17
299 <211> LENGTH: 40
300 <212> TYPE: DNA
301 <213> ORGANISM: Homo sapiens
303 <220> FEATURE:
W--> 304 <221> NAME/KEY: Artificial Sequence
305 <222> LOCATION: (1)..(40)
306 <223> OTHER INFORMATION: Synthetic Oligonucleotide
309 <220> FEATURE:
310 <221> NAME/KEY: misc_feature
311 <222> LOCATION: (1)..(1)
312 <223> OTHER INFORMATION: amino group attached
315 <400> SEQUENCE: 17
316 tttttttttt tttttttttt tttgccacaa tgaatgacat
319 <210> SEQ ID NO: 18
320 <211> LENGTH: 40
321 <212> TYPE: DNA
322 <213> ORGANISM: Homo sapiens
324 <220> FEATURE:
W--> 325 <221> NAME/KEY: Artificial Sequence
326 <222> LOCATION: (1)..(40)
327 <223> OTHER INFORMATION: Synthetic Oligonucleotide
330 <220> FEATURE:
331 <221> NAME/KEY: misc_feature
332 <222> LOCATION: (1)..(1)
333 <223> OTHER INFORMATION: amino group attached
336 <400> SEQUENCE: 18
337 tttttttttt tttttttttt tttgccacaa tcaatgacat
340 <210> SEQ ID NO: 19
341 <211> LENGTH: 17
342 <212> TYPE: DNA
343 <213> ORGANISM: Homo sapiens
345 <220> FEATURE:
W--> 346 <221> NAME/KEY: Artificial Sequence
347 <222> LOCATION: (1)..(17)
348 <223> OTHER INFORMATION: Synthetic Oligonucleotide
351 <400> SEQUENCE: 19
352 atgtcattga ttgtggc
355 <210> SEQ ID NO: 20
356 <211> LENGTH: 17
357 <212> TYPE: DNA
358 <213> ORGANISM: Homo sapiens
360 <220> FEATURE:
W--> 361 <221> NAME/KEY: Artificial Sequence
362 <222> LOCATION: (1)..(17)
363 <223> OTHER INFORMATION: Synthetic Oligonucleotide

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VERIFICATION SUMMARY

DATE: 04/17/2001

PATENT APPLICATION: US/09/823,257

TIME: 10:50:15

Input Set : A:\P0715seqUS.txt

Output Set: N:\CRF3\04172001\I823257.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:22 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1
L:37 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2
L:52 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:73 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4
L:94 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:5
L:109 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6
L:124 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7
L:145 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:160 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:9
L:181 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:10
L:202 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11
L:217 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12
L:232 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13
L:253 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14
L:274 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:289 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16
L:304 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17
L:325 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18
L:346 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19
L:361 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20
L:376 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:21
L:397 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:22
L:418 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23
L:433 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:24